

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated December 26, 2006, has been received and its contents carefully reviewed.

Claims 1-16 are rejected by the Examiner. With this response, claims 1, 4, 5, 8, 11 and 12 are amended, and claims 2, 3, 9, and 10 are canceled without prejudice or disclaimer. No new matter has been added. Claims 1, 4-8, and 11-16 remain pending in this application.

In the Office Action, claims 1-16 are rejected under 35 U.S.C. § 102(e) as being anticipated by US Patent No. 6,548,831 to Tokuhiko et al. (hereinafter "Tokuhiko"). Applicant respectfully traverses the rejection of the claims and requests reconsideration. Applicant submits that Tokuhiko does not disclose either explicitly or inherently each and every element of the claims.

Claims 1 and 4-7 each recites a method of manufacturing an electro line for a semiconductor device having a combination of features including "wherein removing the Mo residue around the Mo/Cu electro line includes oxidizing the Mo residue and removing the oxidized Mo residue, and wherein oxidizing the Mo residue includes one of an O₂ ashing process, an Ultra Violet treating process and an O₂ annealing process." Claims 8 and 11-16 each recites a method of manufacturing a liquid crystal display device including a Mo/Cu electro line having a combination of features including "wherein removing the Mo residue around the Mo/Cu electro line includes oxidizing the Mo residue and removing the oxidized Mo residue, and wherein oxidizing the Mo residue includes one of an O₂ ashing process, an Ultra Violet treating process and an O₂ annealing process."

Applicant submits that Tokuhiko does not disclose at least the above-identified combination of features recited in claims 1, 4-8, and 11-16. Applicant submits that Tokuhiko is silent about any Mo residue present after an etching step or after any other process to form the electro line, and does not disclose "wherein removing the Mo residue around the Mo/Cu electro line includes oxidizing the Mo residue and removing the oxidized Mo residue, and wherein oxidizing the Mo residue includes one of an O₂ ashing process, an Ultra Violet treating process and an O₂ annealing process." Applicant further submits that Jo teaches H₂O₂ is used for etching the Mo layer but does not disclose removing or treating a Mo residue present after an etching or

other processing step. See Jo column 5, line 52 through column 6, line 3. Applicant respectfully submits that Tokuhito does not disclose at least the above-identified features recited in claims 1, 4-8, and 11-16 and accordingly, does not anticipate claims 1, 4-8, and 11-16. Applicant further submits that this deficiency is not cured by Jo.

Applicant believes the above amendments and remarks place the application in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. *A duplicate copy of this sheet is enclosed.*

Respectfully submitted,

Dated: March 26, 2007

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